### **UTILITY PATENT APPLICATION TRANSMITTAL** (Small Entity)

2807

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Total Pages in this Submission

Docket No.

#### TO THE COMMISSIONER FOR PATENTS

**Mail Stop Patent Application** P.O. Box 1450 Alexandria, VA 22313-1450

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility natent application for an

	d by:							
	d bv:							s. PTO 756
yung	, .							
	д СНАЕ,	Jae-1	ryoun YOUN,	Do-h	ieum YOON	, Yong-eun CHO,	Sang-taek KIM, Hyung-sang PARK	22141 10/7
NTII	NUATIO	N AP	PLICATION,	che	ck appropria	te box and supply	the requisite information:	
ntir	nuation		Divisional		Continuat	ion-in-part (CIP)	of prior application No.:	
s a:								
ntir	nuation		Divisional		Continuat	ion-in-part (CIP)	of prior application No.:	
s a:								
ntir	nuation		Divisional		Continuat	ion-in-part (CIP)	of prior application No.:	
nd a	re·							
, a a					Applica	ation Elements		•
X)	Filina fe	e as o	calculated an	d trai	nsmitted as	described below		
	·g							
X	Specific	ation	having		18	pages and i	ncluding the following:	
a.	<b>⊠</b> De:	scripti	ive Title of th	e Inv	ention			
		•				ons (if annlicable)		
_								
d.	☐ Ref	eren	ce to Sequen	ce Li	sting, a Tab	le, or a Computer	Program Listing Appendix	
e.	🗷 Bad	kgro	und of the Inv	/entid	on			
f.	🗷 Brid	ef Su	mmary of the	Inve	ention			
g.	🗷 Brid	ef De	scription of th	e Dr	awings (if file	ed)		
h.	Def	ailed	Description					
i.	🗷 Cla	im(s)	as Classified	l Bel	ow			
		` .						
	ntir s a: ntir d a: d. a. b. c. d. e. f. g. h.	ntinuation s a: ntinuation s a: ntinuation d are: S Filing fee S Specifica a.  S Des b.  Cro c.  Sta d.  Ref e.  S Bac f.  S Brie g.  S Det	ntinuation  a a: ntinuation  a a: ntinuation  b are:  Specification a Specification b Cross Rec c Stateme d Reference e Same Background f Same Brief Sur g Same Brief Sur g Same Brief Sur g Same Claim(s)	ntinuation Divisional s a: ntinuation Divisional s a: ntinuation Divisional d are:  Specification having Descriptive Title of th Cross References to l Color Statement Regarding Descriptive Title of the Reference to Sequence Description of the Description of the Description Description Description Description Description Description Description Description Description	ntinuation Divisional Care:  ntinuation Divisional Care:  ntinuation Divisional Care:  Specification having Descriptive Title of the Invention Cross References to Relate Care:  Reference to Sequence Lister Background of the Invention Care:  Brief Summary of the Invention Care Brief Description of the Drack Detailed Description  i. Claim(s) as Classified Belowers	ntinuation	ntinuation   Divisional   Continuation-in-part (CIP) s a: intinuation   Divisional   Continuation-in-part (CIP) s a: intinuation   Divisional   Continuation-in-part (CIP) d are:  Application Elements  Filing fee as calculated and transmitted as described below Specification having 18 pages and in a.  Descriptive Title of the Invention b.  Cross References to Related Applications (if applicable) c.  Statement Regarding Federally-sponsored Research/Decentry a.  Background of the Invention f.  Background of the Invention g.  Brief Summary of the Invention g.  Brief Description of the Drawings (if filed) h.  Detailed Description i.  Claim(s) as Classified Below	sa:  Intinuation   Divisional   Continuation-in-part (CIP) of prior application No.:  Intinuation   Divisional   Divisional   Continuation No.:  Intinuation   Divisional   Divisional   Divisional Part (CIP) of prior application No.:  Intinuation   Divisional   Divisional Part (CIP) of prior application No.:  Intinuation   Divisional   Divisional Part (CIP) of prior application No.:  Intinuation   Divisional   Divisional Part (CIP) of prior application No.:  Intinuation   Divisional   Divisional Part (CIP) of prior application No.:  Intinuation   Divisional   Divisional Part (CIP) of prior application No.:  Intinuation   Divisional   Divisional Part (CIP) of prior application No.:  Intinuation   Divisional   Divisional Part (CIP) of prior ap

## UTILITY PATENT APPLICATION TRANSMITTAL (Small Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No. 2807

Total Pages in this Submission

3.	X	Dra	rawing(s) (when necessary as prescribed by 35 USC 113)							
	a.	X	Formal	Number of Sheets	10					
	b.		Informal	Number of Sheets	·					
4.	X	Oat	h or Decla	ration						
	a.	X	Newly ex	ecuted (original or copy)	☐ Unexecuted					
	b.		Copy from	m a prior application (37 CFF	1.63(d)) (for continuation/divisional application only)					
	C.	X	With Pow	ver of Attorney 🔲 Witho	ut Power of Attorney					
	d.		Signed st	DN OF INVENTOR(S) tatement attached deleting in .F.R. 1.63(d)(2) and 1.33(b).	ventor(s) named in the prior application,					
5.		The und	entire dis er Box 4b,		Ab is checked) ion, from which a copy of the oath or declaration is supplied of the disclosure of the accompanying application and is hereby					
6.		CD	ROM or C	D-R in duplicate, large table	or Computer Program (Appendix)					
7.		App	lication Da	ata Sheet (See 37 CFR 1.76)						
8.		Nuc	leotide an	d/or Amino Acid Sequence S	ubmission (if applicable, all must be included)					
	a.		Compute	r Readable Form (CFR)						
	b.		Specifica	ition Sequence Listing on:						
			i. 🔲	CD-ROM or CD-R (2 copies	; or					
			ii. 🔲	Paper						
	C.		Statemer	nt(s) Verifying Identical Pape	and Computer Readable Copy					
				Accompanyi	ng Application Parts					

Applicati n Elements (Continued)

10.		37 CFR 3.73(B) Statement (when there is an assignee)					
11.		English Translation Document (if applicable)					
12.	X	Information Disclosure Statement/PTO-1449   Copies of IDS Citations					
13.		Preliminary Amendment					
14.	X	Return Receipt Postcard (MPEP 503) (Should be specifically itemized)					
15.		Certified Copy of Priority Document(s) (if foreign priority is claimed)					
16.	X	Certificate of Mailing					
		☐ First Class ☑ Express Mail (Specify Label No.): EV 260995954 US					

Assignment Papers (cover sheet & document(s))

# UTILITY PATENT APPLICATION TRANSMITTAL (Small Entity)

2807

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Total Pages in this Submission

Docket No.

		Accompanying Application Parts (Continued)
17.	X	Applicant claims small entity status. See 37 CFR 1.27.
		☐ (Optional) Small Entity Statement(s) - Specify Number of Statements Submitted:
18.		Additional Enclosures (please identify below):
		Request That Application Not Be Published Pursuant To 35 U.S.C. 122(b)(2)
19.		Pursuant to 35 U.S.C. 122(b)(2), Applicant hereby requests that this patent application not be published pursuant to 35 U.S.C. 122(b)(1). Applicant hereby certifies that the invention disclosed in this application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing of the application.
		Warning
		An applicant who makes a request not to publish, but who subsequently files in a foreign country or under a multilateral international agreement specified in 35 U.S.C. 122(b)(2)(B)(i), must notify the Director of such filing not later than 45 days after the date of the filing of such foreign or international application. A failure of the applicant to provide such notice within the prescribed period shall result in the application being regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the notice was unintentional.

### 16711

S. PTO

# UTILITY PATENT APPLICATION TRANSMITTAL (Small Entity)

Docket No. 2807

(Only for new nonprovisional applications under 37 CFR 1.53(b))

**Total Pages in this Submission** 

#### Fee Calculation and Transmittal

For	#Filed	#Allowed	#Extra		Rate	Fee
Total Claims	4	- 20 =	0	х	\$9.00	\$0.00
ndep. Claims	1	- 3 =	0	×	\$43.00	\$0.00
Multiple Dependent	Claims (check	if applicable)				\$0.00
					BASIC FEE	\$385.00
OTHER FEE (speci	fy purpose)	ASS	IGNMENT R	ECORD	ATION	\$40.00
	-				TOTAL FILING FEE	\$425.00
as described be  Charge  Credit a  Charge  Charge	ereby authorize ow. the amount of ny overpayment any additional fil	\$425.00 a . ling fees required t in 37 C.F.R. 1.18	as filing fee. under 37 C.F	Accour	nt No. 19-4675	

CC:

Dated: NOV. 21, 2003